

Project Operating Plan – NTS Recovery Act Project

NTS Recovery Act Project Project Operating Plan

BACKGROUND

Recovery Act Project:	NTS Recovery Act Project
TAFS:	89-09/10-0253
Project Identification Code:	2002070
Recovery Act Bill Reference:	PL 111-5 Title IV – Energy and Water Development, Defense Environmental Cleanup (H.R. 1-26)
Project Cost:	\$44,325,000
Budget Authority:	06049, FD.06.21.00.0
Program Office:	Environmental Management (EM)
Recovery Program Plan:	EM - Defense
Management Office:	Nevada Site Office Janet Appenzeller-Wing, Deputy Assistant Manager for Environmental Management, wing@nv.doe.gov

LEADS

Implementation:	N/A
Breakthrough:	N/A
Laboratory:	N/A

I. SUMMARY & OBJECTIVES

Summary: The Environmental Management objective on the Nevada Test Site includes assessing the degree of contamination of support facilities, soils, and groundwater resulting from the historic nuclear weapons testing program, and performing corrective actions required by federal and state regulations. The goal is to implement appropriate corrective actions and establish institutional controls to ensure the protection of human health and the environment. Recovery Act funding of this project will accelerate remediation of soil up to five years, drilling activities one year, and demolition of two excess facilities up to five years. By the end of FY 2011 the following will be accomplished:

- Characterization and determination of corrective actions for contaminated soil at four corrective action units
- Installation of two groundwater monitoring wells in the area of Pahute Mesa to improve environmental characterization data
- Demolition of the Reactor Maintenance, Assembly, and Disassembly Facility and the Pluto Disassembly Facility, thereby reducing the department's environmental liability footprint by approximately 50,000 square feet
- Demolition of two ancillary structures (i.e. nuclear furnace piping and a removable shed) associated with the Test Cell C Facility
- Remediation of one buried ordnance site on the Tonopah Test Range

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- Low-level and mixed low-level waste disposal operations in support of the DOE Complex

By the end of FY 2010 the following will be accomplished:

- Initial investigation activities at four contaminated soils corrective action units and submit Corrective Action Investigation Plans to the State of Nevada
- Demolition of two ancillary structures (i.e. nuclear furnace piping and a removable shed) associated with the Test Cell C Facility
- Low-level and mixed low-level waste disposal operations in support of the DOE Complex

This Recovery Act work ties to the following DOE and EM Strategic Goals and Themes:

DOE Strategic Goal 4 – Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.

DOE Strategic Goal 5 – Management and Excellence – Enabling the Department’s mission through sound management and business practices.

EM Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.

Potential Buy-Back Work Scope

Based on the potential availability of funds from unused management reserve and contingency funds and from cost efficiencies in executing the planned projects, the following additional candidate projects have been identified should funding become available.

- Characterization and determination of corrective actions for contaminated soil at a fifth corrective action unit
- Characterization and closure of contaminated railroad tracks associated with the Engine Maintenance, Assembly, and Disassembly Facility
- Removal of depleted uranium and ordnance at one site on the Tonopah Test Range and removing the existing land use restriction, thereby reducing the department’s future environmental liability footprint

Public Benefits: The near-term benefits of this project include a reduction in risk to site workers and the environment. The long-term benefits include the accelerated completion of project elements, a reduction in the total project baseline cost, and a more efficient use of taxpayer money.

Recovery Act Project Impacts: This investment fully supports the strategic goals and the mission of the DOE which encompasses the accelerated risk reduction and cleanup of the

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environmental legacy of the nation's nuclear weapons program and government-sponsored nuclear energy research. Acceleration of these activities through the Recovery Act is anticipated to expedite completion of existing environmental protection and site cleanup goals by several years (i.e. reduce the site completion range from 2027-2038 to 2026-2035) and reduce the estimated life-cycle cost range from \$1,670 – \$1,965 M to \$1,659 – \$1,925 M.

This project will accelerate remediation of soil up to five years, drilling activities one year, and demolition of several excess facilities up to five years (reducing the site's contaminated footprint by approximately 50,000 square feet) from the nation's historic nuclear weapons testing program. The project relies on existing, proven technologies, and utilizes a risk-based approach to cost-effectively reduce hazards to Nevada Test Site workers and the environment.

II. COST & SCHEDULE

Budget

Table 1: Budget Implementation Monthly Obligations (actual obligations to contractors for Apr 2009 through Feb 2010 and projected obligations to contractors for Mar 2010 through Sept 2010) (\$M)

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with an obligations table.

Table 2. Budget Implementation Actual and Planned Monthly Expenditures(actual costs for Apr 2009 through Feb 2010 and projected costs for Mar 2010 through Sept 2011 and then, if applicable, projected annual expenditure in FY2012) (\$M)

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with a costs table.

Funds Returned and Offsetting Collections

N/A

Table 3: Funds Returned and Offsetting Collections

Not applicable

Indirect Costs

Indirect cost estimates are currently being compiled at the contractor level. Contractors will be required to track and report on actual indirect costs.

In accordance with the general principles of the Recovery Act, DOE Nevada Site Office will take the following steps to minimize the impacts of indirect costs and enhance transparency and accountability of project:

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- (a) Clearly identify the estimated full cost of projects to include total direct and indirect costs, indirect costs rates, and adjust existing indirect cost rate to account for the material infusion of funds provided in the Recovery Act;
- (b) Ensure all funds transferred to contractors/subcontractors are completed using the Approved Funding Program process described in Chapter 12 of the Accounting Handbook; and
- (c) The Federal Administrative Charge (FAC) of three percent is waived on reimbursable work funded by the Recovery Act and performed by DOE federal offices or the site contractor.

Table 4: Changes to Baseline Budget information

Not applicable

Milestones

See attachment for weekly/monthly milestones.

NEPA Compliance: The scope of work is addressed in the NTS Site-Wide Environmental Impact Statement (DOE/EIS-0243; 61 FR 54437, 10/18/96), Record of Decision (ROD) (61 FR 65551, 12/13/96) and Amended ROD (65 FR 10061, 2/25/00). The Nevada Site Office NEPA Compliance Officer will monitor implementation and, as necessary, determine whether additional NEPA review is required.

In executing this Recovery Act project, DOE-NTS will implement the project management requirements of DOE O 413.3A, *Program and Project Management for the Acquisition of Capital Assets*. DOE-NTS will use the flexibility afforded by DOE O 413.3A and tailor its requirements to this project. This tailored approach does not mean deviation and will maintain the utility and value of clear project definition, configuration management and change control, and sound project controls, including earned value management.

- DOE-NTS intends to use existing EM site systems reporting requirements through modifications to the contract that will fund this Recovery Act Project.
- Continue using approved programs and procedures currently in place with NTS contractors and their subs, applying project management principles to Recovery Act Project execution, including reviewing and validating EM project cost and schedule baselines consistent with DOE Order 413.3A and identifying project risks and strategies for managing them.
- Continue use of industry standard Earned Value Management System (EVMS) to compare actual project scope, cost, and schedule performance against planned performance as depicted in the baseline.
- Continue monitoring of the contractors' EVMS reports to ensure the Recovery Act Project is on track and, if not or if trends are in a negative direction, to develop and implement corrective actions.

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- Hold monthly management reviews to provide updates on the Recovery Act Project to EM's senior-most executives.
- Secure support service contractors to provide limited augmentation of federal procurement, budget and finance, project controls, and technical oversight capabilities for the Recovery Act Project.
- Assign appropriately qualified staff to the Recovery Act Project to provide technical and programmatic oversight of the contractors performing the work and be the day-to-day governmental interface and manager for the project.
- Use an Integrated Project Team (IPT) of Federal and contractor staff with project knowledge and subject matter expertise essential to the successful planning and execution of the project – including safety, risk management, engineering, quality assurance, contracts administration, and project controls.
- Develop detailed risk management plans for the Recovery Act Project to identify and mitigate risks, and assign roles and responsibilities for managing the risks.

Table 5: Delivery Schedule for Capital Asset Projects

Not applicable

NOTES: Impacts to the critical path may include unanticipated field conditions (e.g. well failure, extent of contamination, etc.) and regulatory decision points. These risks are maintained in the project's risk management plan. The baseline schedule is at a high confidence level and is based on past experience with similar projects at the Nevada Test Site.

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III. PERFORMANCE

Performance Measures

Table 6: Project Performance Targets

Recovery Act Project Identification Code	2002070
Linkage To S-1 Priorities	National Security and Legacy: Complete legacy environmental clean-up This investment fully supports the strategic goals and the mission of the DOE which encompasses the accelerated risk reduction and cleanup of the environmental legacy of the nation's nuclear weapons program and government-sponsored nuclear energy research.
Linkage to Current Program Goal (if applicable)	DOE Strategic Goal 4 – Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production. EM Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.

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Two-Year Outcome-Oriented Performance Measure	<p>Characterization of four contaminated soils corrective action units, drilling of two groundwater wells, remediation of one buried ordnance site on the Tonopah Test Range, demolition of two facilities and two ancillary structures on the NTS.</p> <p>Proposed additional scope would include characterization of one additional contaminated soils corrective action unit, closure of contaminated railroad tracks on the NTS, evaluation of the Hydrostratigraphic Framework Model using newly acquired data for Pahute Mesa, and remediation of depleted uranium and ordnance on the Tonopah Test Range.</p>
First Year Performance Target (FY09)	<p>Complete initial funds distribution</p> <p>Complete drilling of first accelerated groundwater well</p>
Q1 - Project-Level Quarterly Performance Milestone(s)	N/A
Q2 - Project-Level Quarterly Performance Milestone(s)	N/A
Q3 - Project-Level Quarterly Performance Milestone(s)	Complete initial funds distribution - \$27.038M
Q4 - Project-Level Quarterly Performance Milestone(s)	<p>Complete secondary funds distribution - \$17.287M</p> <p>Complete drilling of first accelerated groundwater well</p>
Second Year Performance Target (FY10)	<p>Complete initial investigation activities at four contaminated soils corrective action units and submit CAIPs to State of Nevada</p> <p>Complete demolition of two ancillary structures associated with the Test Cell C Facility</p> <p>Complete remediation activities at one buried ordnance corrective action unit and submit CR to State of Nevada</p>
Q1 - Project-Level Quarterly Performance Milestone(s)	<p>Complete demolition of two ancillary structures associated with the Test Cell C Facility</p> <p>Complete initial investigation activities at contaminated soils Corrective Action Unit 367 and submit CAIP to State of Nevada</p>

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Q2 - Project-Level Quarterly Performance Milestone(s)	Complete initial investigation activities at contaminated soils Corrective Action Unit 374 and submit CAIP to State of Nevada
Q3 - Project-Level Quarterly Performance Milestone(s)	Complete initial investigation activities at contaminated soils Corrective Action Unit 375 and submit CAIP to State of Nevada Complete initial investigation activities at contaminated soils Corrective Action Unit 106 and submit CAIP to State of Nevada
Q4 - Project-Level Quarterly Performance Milestone(s)	Complete remediation activities at buried ordnance Corrective Action Unit 408 and submit CR to State of Nevada

NOTE: In addition to the cost and schedule performance targets, the number of remediations completed will be captured in Fiscal Year 2011. Recovery Act funding will accelerate the closure of several environmental release sites on the Nevada Test Site, accelerate completion of program elements by several years, and result in a long-term cost savings to the program.

National Strategic Benefits

Table 7: National Strategic Benefits

Information on National Security Benefits Under the Recovery Act is not applicable to this project.

NOTES : No carbon emission or oil consumption reductions are anticipated.

IV. MANAGEMENT

Secretarial-level Items

Intended Results and Linkage to Secretary's Priorities

Table 8 depicts the linkages between short term (5 year) qualitative and quantitative benefit estimates and the Secretarial-level Priorities through September 2014 and is available on SharePoint

Collaboration and Coordination

This project requires coordination with the U. S. Air Force for access to the Nevada Test and Training Range to drill one of the groundwater monitoring wells in Pahute Mesa. Additionally, the Nevada Division of Environmental Protection has regulatory and oversight responsibility for Nevada, and ensures that the impacts associated with the release of hazardous substances, pollutants, solid wastes, and hazardous waste into the environment are thoroughly investigated and remediated per applicable regulations and agreements. The Nevada Division of Environmental Protection issues and provides oversight of various environmental permits and enters into agreements with Nevada's environmental projects.

Federal Infrastructure Investments

This project does not include any federal infrastructure investments. However, ancillary benefits may be achieved through the elimination of facilities resulting in reduced electrical power consumption and corresponding reduction of greenhouse gas emissions. Reuse/Recycle of excess materials could result in reduced consumption in fossil fuels required to process raw materials.

These facilities contain hazardous or radiological material. Accelerating the removal and proper disposal reduces risk of releases of this material to the environment

Line Management

The Nevada Site Office intends to use existing systems and practices to effectively monitor and report on the Recovery Act Project activities, including:

- Fully implement all Recovery Act transparency and reporting requirements through modifications to the contract that will fund this Recovery Act Project.
- Conduct audits and assessments to maintain accountability and transparency with respect to Recovery Act activities.
- Implement a separate Work Breakdown Structure and cost structure to effectively capture, report, and maintain accountability for the Recovery Act funds.
- Continue applying project management principles to Recovery Act Project execution, including reviewing and validating EM project cost and schedule baselines consistent with DOE Order 413.3 and identifying project risks and strategies for managing them.
- Continue use of industry standard Earned Value Management System (EVMS) to compare actual project scope, cost, and schedule performance against planned performance as depicted in the baseline.

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- Continue monitoring of the contractors' EVMS reports to ensure the Recovery Act Project is on track and, if not or if trends are in a negative direction, to develop and implement corrective actions.
- Hold monthly and quarterly management meetings with contractors to provide updates on the Recovery Act Project.
- Assign appropriately qualified personnel to the Recovery Act Project to provide technical and programmatic oversight of the contractors performing the work and are the day-to-day governmental interface and manager for the project.
- Use the Nevada Site Office Environmental Restoration Integrated Project Team of federal and contractor staff with project knowledge and subject matter expertise essential to the successful planning and execution of the project – including safety, risk management, engineering, quality assurance, contracts administration, and project controls.
- Maintain detailed risk management plans to identify and mitigate risks.

Needs from Staff Offices

N/A

1) Human Capital

Federal staff is on board and systems are in place to ensure cost tracking, validation, and oversight of project execution. No additional permanent federal staff will be hired.

Table 9: Information on Hiring Under the Recovery Act

Information on Hiring Under the Recovery Act is not applicable to this project.

2) Procurement

Table 10: Procurement Plans is available on SharePoint